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PTO/SB/21 (01-08)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/530,096	
	Filing Date	April 1, 2005	
	First Named Inventor	Masashi KUDO et al.	
	Art Unit	1712	
	Examiner Name	Kuo Liang Peng	
Total Number of Pages In This Submission	7	Attorney Docket Number	121036-0078

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Firm Name	BUTZEL LONG		
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Appl. No. 10/530,096

PATENT APPLICATION*IN THE UNITED STATES PATENT AND TRADEMARK OFFICE*

Group
Art Unit: 1712

Attorney
Docket No.: 121036-0078

Applicants: Masashi KUDO et al.

Invention: SEALING MATERIAL

Serial No: 10/530,096

Filing Date: April 1, 2005

Examiner: Kuo Liang Peng

Certificate Under 37 CFR 1.8(b)

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on January 21, 2009
Debra L. BurnsREPLY BRIEF

Commissioner of Patents
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Sir:

In response to the Examiner's Answer mailed November 19, 2008 in connection with the above-identified application, applicants submit the following:

One page 5-6 of the Examiner's Answer the Examiner states that:

- 1) Bentz does, as a whole, disclose an **automobile wire harness sealed by a sealing material** to avoid the damages resulting from **vibration**:

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- 2) Bentz teaches a method of preventing contact breakage of a wiring harness due to **vibration** in automobile **engines** by utilizing an arrangement for mounting a wiring harness on a support plate where at least a portion of the wiring harness is **sealed** with a sealing material;
- 3) Bentz clearly recognizes the well-known **vibration problem**; and
- 4) JP255 teaches a sealing material having **vibration absorption** capacity for using in automobile engines ([0086]).

It is initially noted that the claims on appeal do not recite that the sealing material has "vibration absorption" properties. In this regard appellants' specification discloses that the sealing material has "vibration insulation" properties when used as HDD cover gaskets.

When used as wire a hardness sealing material such as "a connector packing, a gasket, an O-ring, etc." (See paragraph bridging pages 19-20 of appellants' specification), the sealing material has properties such as good adhesiveness to electrical wires, good oil resistance, low hardness, and low insertion resistance to electrical wires.

The Examiner's basis for combining the teachings of Bentz and Masayuki et al. - for vibration absorption - is not actually pertinent to appellants' claimed invention on appeal.

Bentz teaches the use of "polyurethane or silicone" as sealing materials.

Each of these materials is applied as a liquid form to fill recess 11 in the embodiment of Bentz shown in Fig. 1. This type of sealing is similar to potting.

At page 4, lines 16-22 of appellants' specification, appellants disclose:

As sealing materials for wire harnesses used in electric wiring of automobiles, industrial machinery, etc., silicone rubber has been mainly used so far, but the silicone rubber has such problems as poor adhesiveness to wires and poor oil resistance when

used in the engine room, etc. Furthermore, in the case of the silicone rubber of a lower hardness, scratches are liable to occur at the time of wire insertion because of the low mechanical strength, resulting in a problem of poor sealability.

Thus, appellants have specifically identified properties of silicone rubber which are not compatible to the goals of their claimed invention. Appellants' invention is an improvement over the use of silicone. As such, appellants' invention is an improvement over the teachings of Bentz.

Thus, to establish a *prima facie* case of obviousness, the Examiner is required to establish motivation or suggestion within the prior art to achieve some benefit along the line of appellants' invention.

Otherwise, the Examiner must find some other motivation or suggestion to combine the prior art.

In the present situation, the Examiner has not found that the combined teachings of Bentz and Masayuki et al. lead to improvements in good adhesiveness to electrical wires, good oil resistance, low hardness, and low insertion resistance to electrical wires. (Appellants' disclosed improvements)

The only improvement the Examiner relies upon is vibration absorption.

The Examiner states that Masayuki et al. "teaches a sealing material having vibration absorption capacity for using in automobile engines ([0086])."

Paragraph [0086] of Masayuki et al. reads as follows:

A Plastic solid acquired from a hardenability constituent for shaping of this invention can be widely used centering on a gasket and packing as a Plastic solid in which rubber elasticity is shown. For example, in the automobile field, it can be used for a sealant for airtight maintenance, **vibration isolation material** for glass, a **vibroisolating material** of a body part especially a window seal gasket, and a gasket for door glass as a body part article. As a chassis part article, it can be used for an

engine and suspension rubber, especially engine mount rubber for vibration proof and noise control. As an engine part, it can be used for the hose an object for cooling, an object for fuel supply, for exhaust control. etc., a sealant for engine oils, etc....

There is no teaching in this passage that the composition of Masayuki et al. absorbs vibrations in the manner of the polyurethane and silicone of Bentz.

At best, this passage teaches that the composition of Masayuki et al. can isolate vibration between two structural elements – such as “a vibroisolating material of a body part especially a window seal gasket, and a gasket for door glass.”

However, such “vibroisolating” is not at all applicable to the arrangement of Bentz in which the vibration that is to be absorbed is that which tends to effect “contact break due to vibration.”

In this regard, it is noted that the manner in which the “connection between the connecting wires of the wiring harness 60 and connection elements (not depicted)” are in a recess 11 “in which is arranged a sealing medium 70 which surrounds the entire recess” (as shown in Fig. 1) precludes Bentz from having a structure in which a vibroisolating material (according to Masayuki et al.) would be useful for isolating vibration between two structural elements.

Thus the teachings of Masayuki et al., as regards isolating vibration are not applicable to the arrangement of Bentz.

Thus, there is no support for the Examiner’s proposed combination of Bentz and Masayuki et al.

It is further noted that Masayuki et al. teaches “plastic solid” articles such as the gaskets and packings in paragraph [0086].

This is commensurate with appellants' disclosure and claims directed to a "cured product" (or vulcanized product) of the composition.

The use of such a cured or solid article (e.g. appellants' disclosure of "a connector packing, a gasket, an O-ring, etc.") is not compatible with the polyurethane or silicone of Bentz.

In this regard, Bentz requires a liquid composition that can be used to pot the connection between the wires of the wire harness and the connectors.

Further in this regard, it is noted that appellants' claimed "low insertion resistance to electrical wires" (See claim 34) is not at all applicable to (and thus not obvious over) Bentz inasmuch as Bentz does not teach a sealing element through which the wires of the wiring harness are inserted.

On page 8 of the Examiner's Answer the Examiner suggests that the composition of Masayuki et al. could be applied as a liquid on Bentz and thereafter vulcanized or cured.

It seems as though the Examiner's translation of Masayuki et al. includes an Example 2 in which curing is accomplished at 150°C. It seems like this high temperature could have adverse effects on the elements of the assembly of Bentz, which would lead those skilled in the art to avoid subjecting the assembly of Bentz to such curing conditions.

On page 4 the Examiner has taken the position that appellants' amount of filler is a "Result-Effective" variable and that "Applicants do not show the criticality of the filler amount.

In the last full paragraph on page 19 of appellants' specification it is disclosed that "a proportion of more than 100 parts by weight [of a reinforcing agent or a filler] makes the hardness too high." Also in this paragraph it is disclosed that: "For use as a wire harnesses sealing materials

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for automobiles, it is preferable that the surface hardness of curing product obtained by curing the composition is not more than 50."

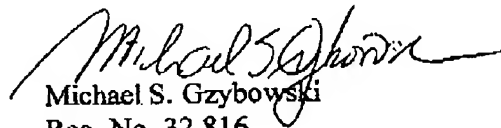
Accordingly, appellants' have disclosed a criticality associated with the amount filler which the prior art does not appreciate, teach or render obvious.

CONCLUSION

For the reasons advanced above and those set forth in appellants' Brief on Appeal, appellants contend that the rejection of claims 15-19 and 34 under 35 U.S.C. §103(a) as being unpatentable over Bentz in view of Masayuki et al. is improper because the Examiner has not met the burden of establishing a prima facie case of obviousness of appellants' claimed invention.

Reversal of the outstanding rejection on appeal is earnestly solicited.

Respectfully submitted,


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